Far sighted political leaders are using technology to transform government and politics by slashing bureaucracies; improving services; producing innovative solutions to some of our nation’s thorniest problems; and offering ordinary people access to a degree of information and individual influence until recently accessible only to the most powerful citizens.

*Government 2.0* by William Eggers
Information Technology is committed to provide a reliable, secure, stable, sustainable, and adaptable technology environment for the enterprise.

**Discussion Items**

Government 2.1: IT Transformation

Strategic Planning

IT Steering Committee

Performance Contracts

IT Budget

Capital and Operations Projects

Other IT Activities

Enterprise Solutions Development Projects

Major Departmental IT Activities

Goals of Government 2.0
Government 2.1: IT Transformation

The Information Technology Department (IT) continues its reform, transformation, and strategic improvement. We have termed this progression Government 2.1 (as our first advancement beyond basic Government 2.0). It is IT’s goal to continually communicate our vision and progress as we become a professional proficient consulting service to sustain the City’s corporate technologies and Enterprise Information Management (EIM) services.

IT is committed to run in a manner which is sustainable, valued, strategic and transparent, adhering to the Government 2.0 model (the transformation of government, enabled by technology advances). The Government 2.0 model results in government that is less burdensome, less costly, and infinitely more accountable (see page 13 for a brief introduction of Government 2.0 principles guiding Grand Rapids IT).

Developing Enterprise Information Management (EIM) for the City, IT has committed to a number of significant long term strategies. Over the past year, IT has begun reforming and transforming our services as follows:

- Committed itself to engaging components and best practices that are “very mainstream”, in both the technical industry and in benchmark comparison to other cities.
- Determined that all “primary” infrastructure support services will be supported by regional expert augmentation. IT will no longer rely on non-regional resources to sustain its daily operations.
- Required that standards are defined and documented for data networking, voice communications, data storage, computing servers, and many other activities.
- Encouraged departmental liberties when engaging and developing their tactical-operational IT needs, supported by competitive procurement whereby desktop computers, peripherals, and professional services may be procured independently by user departments.
- Developed and implemented a consistent and transparent budget and allocation of IT charges with departments paying only for the solutions and support delivered.
- Initiated City-County Co-operation. The City and the County are collaborating to share resources, solutions, and strategic coordination. A Collaboration Agreement has been drafted. City and County staff have worked together on key infrastructure and staffing procurement processes. The City plans to share its improved Internet capacity with the County. The County is working with City contract staff to accommodate direct access to very large datasets (i.e. Digital Orthophoto and Oblique Imagery), eliminating duplication and administration by the City resulting in additional savings.
- Begun the processes of re-racking and consolidating City IT data centers to 1 Monroe Center. This effort is anticipated to be complete by September 2009. The majority of IT Operations staff have also been relocated to 1 Monroe Center.
- Reduced Full Time On-Site (FTO) IT staff by almost half, while facilitating expert augmentation, as needed, with local support for operations and national subject matter expertise.
Strategic Planning

An enterprise-wide IT Strategic Plan was recently drafted with the goal of assuring that the City remains competitive and builds technology in the right direction – which is right, reasonable, and responsible, with the right technology at the right time. This is a 5 year IT Strategic Plan to support IT Enterprise Information Management (EIM). The plan provides a Citywide, enterprise approach based on standards, consistency, and compatibility to guide the City in cost-effective selection, use, and support of technology that aligns with City resources, business needs, and processes. Microsoft Citizen Service Platform, enhanced by our own Government 2.0 EIM strategies, is foundational to our approach to assure long-term operational strategy.

The City’s Enterprise Technology Strategic Plan is not an end result, but rather an evolving long-term strategy. The Plan will allow for change over time and serve as a broad guideline for action that will be revised as technologies emerge and the City’s business requirements change. The plan is a working tool that links the City’s goals with information technology to provide improved government processes and enhanced customer service.

The plan addresses all facets of shared Citywide technology services and related infrastructures as they relate to the enterprise. Influencing factors include: solutions such as sustained capital management with standardized infrastructure architectures, telephony enhancement with Voice Over Internet Protocol (VOIP) which includes expanded capabilities, collaboration and enhanced data management using Microsoft SharePoint Server (MOSS), Citizen Relationship Management (CRM), Cloud Computing, Web 2.0 collaboration tools, Dash Board Performance Management, and optimized FTO staffing with expert augmentation.

IT endeavors to maximize the benefits of high-level organizational cooperation while allowing individual and group liberty and flexibility. With IT assistance, departments are expected to develop their own individual tactical technology strategies as well.

IT Steering Committee

Instituted over the past year (and meeting monthly), the Information Technology Steering Committee (ITSC) consists of the top departments receiving service from IT. The ITSC’s role is to assure proper communication and feedback and to realize maximum technology benefits at acceptable costs for the enterprise. The Committee will, with recommendations and counsel from IT, identify technology opportunities; prioritize major initiatives, projects, and proposals; recommend IT Best Practices; and assist with IT strategic planning. In doing so, the committee serves as an important coordination and communication vehicle among all City users, IT, and the Executive Office. The committee reviews and presents recommendations for the City Manager’s approval. Results regarding the status of projects and actions taken by the committee are being published quarterly.
EXECUTIVE UPDATE

Performance Contracts

IT is committed to competitively and openly procure all IT capital and professional services with performance contracting assuring valued service. This includes on-site expert augmentation for software, operations management staffing, and infrastructure refresh activities. This allows the contractual flexibility to augment, as needed, with full-time and part-time professional expertise, using both local and national technology providers.

The results have been the right-sizing of IT’s staffing, comprised of 27 non-City staff and 5 City staff members.

Within the past eight months, IT has evaluated and competitively procured professional services supporting IT staffing, critical infrastructure refresh projects, and support operations as follows:

**CDW** is ranked No. 34 on Forbes’ list of America’s Largest Private Companies. CDW is currently working to refresh the City’s data network. We expect this project to be completed by December 2009.

**CPR** is West Michigan’s largest IT solutions provider, supplying the City with IT managed services including network administration, enterprise server virtualization, and desktop support.

**EMA** has extensive national experience assisting hundreds of municipalities and public agencies with technology solutions, including Geographic Information Systems, Information Strategic Planning, Customer Information and Billing Systems (CIS), and Asset Management.

**NGIT**, Grand Rapids long time technology partner, Northrop Grumman, continues to staff legacy mainframe operations for the City.

**RCM** is the leading Microsoft consulting firm in the Great Lakes and Heartland regions. This local company recently became the Enterprise Integration Solutions unit of RCM offering web and solutions development services for individual City department and enterprise innovation.
IT continues to improve staffing, capital, and operational budget requirements. Mindful of the financial position of the City, IT’s budget is lean, while sustaining both operational and strategic direction. Now in its second revision, IT’s budget and its allocation have been refined to a point where it is repeatable, defensible, validated, and audited. It is supported by logical measures for each service rendered, in order to keep the allocation composition transparent and consistent from year to year, with industry benchmark comparisons.

- The City spends, on average, less than 3% of the City’s gross annual revenue in support of corporate IT (as compared to an industry average of 3.6%).
- Nationally, the ratio of agency employees per IT staff member is 36 to 1 while City’s IT ratio is 58 to 1.
- 55% of IT’s budget is fixed-contractual obligations for software, hardware, and annual maintenance fees not including staff.
- 38% of IT’s budget supports staffing costs, compared to an industry benchmark of 45%.
- Approximately half of IT’s budget is charged to general fund departments.
- Since 2003, IT Staff has been reduced by almost 50% from a high of 63 to a FY09 total of 32.
- IT’s FY09 operating budget is 14% less than it was in FY08 and the FY10 recommendation is 3% less.
In an effort to assure sustainable, strategic, transparent, competitive and valued service to the City, IT has implemented a capital management fund to finance ongoing IT infrastructure replacement and rehabilitation. IT will constantly assess budget and strategic direction while maximizing resources to ensure that IT services remain valued. To that end, significant cost savings have been achieved. Of the $6.2 million dollars of capital bond funds authorized by the City Commission for infrastructure reform, IT has spent zero! This has been accommodated using cash reserves and annual budget allocation.

The following represents priority capital & operations projects currently underway:

**High Volume Image Storage:** Expand the City’s capacity to store and retrieve very large volume digital documents resulting from document scanning, digital photo, and digital video.

**Business Continuity Plan (BCP):** Creation and validation of a practiced logistical plan for recovery and restoration of partially or completely interrupted critical (urgent) functions within a predetermined time after a disaster or extended disruption. The BCP details how business will continue in the event of a disaster. Scenarios include local incidents like building fires, regional incidents like earthquakes, or national incidents like pandemic illnesses.

**CityNet Reform:** CityNet (the City’s data network) phased replacement is 65% complete, significantly improving the reliability and capacity of the City’s computing infrastructure. CityNet will also be used to support the City’s Telephony Refresh into a Voice Over Internet Protocol (VOIP) architecture.

**Telephony Refresh:** Advance the City’s traditional telephone PBX switch configuration to a more flexible VOIP architecture, offering the City expandable unified communication capabilities. An RFP is currently being developed with an anticipated release in January 2009.

**Server Refresh-Virtualization:** Consolidate the City’s existing server farm into a virtual server farm using VMware. This effort is currently 80% complete.

**Oracle RDBMS Architecture Upgrade:** Improve and migrate the City’s many database environments and applications to the new Oracle 11G environment. (The current architecture will not be supported by the vendor as of July 2009.)
Executive Update

Capital & Operations Projects (continued)

Email Archive: Deployment of the City's new Barracuda Email Archive solution archives ALL email. Both incoming and outgoing messages are immediately captured and subject to FOIA and other searches.

Internet Capacity: The City’s Internet capacity has increased from 4Mbits/s to 45Mbits/s. The County has been invited to share the City’s new capability.

Volume Printer Replacement: The City’s high volume printer supporting Water, Treasurer, and Assessor has been purchased, installed and is in operation for the reliable and timely printing of water bills, tax bills, and assessment notices.

Data Center Consolidation: Over an 18-month timeframe, the City will relocate IT servers and telecommunication equipment from our existing location at 201 Market to 1 Monroe Center.

Other IT Activities

IT has established strategic best practices allowing flexibility and liberty so that departments may innovate and meet their individual department needs while remaining cohesive within a strategic enterprise information management structure. Departments now have liberty to engage new technologies supporting their unique department needs, allowing IT to focus on enterprise information management (EIM) and shared Citywide needs.

Departments have been encouraged to develop a Departmental IT Strategic Plan to identify future innovation of their daily operations that will improve service delivery and produce efficiencies. IT Project Managers stand ready to assist all efforts to leverage technology. Project Managers will help departments identify pertinent technology solutions, follow industry best practices, estimate associated costs, and facilitate procurement and deployment.
IT is now beginning to focus efforts on enterprise information management standards and solutions development. IT is working to support the increase of information management, collaboration, and communication technologies in the City to achieve more efficient and improved services. These improvements will also provide the public easier access to City information and services, offering an effective method for feedback to the City. IT has standardized solutions development with a formal approval process supported by a Total Cost of Ownership (TCO) estimate for each project under consideration. The approval process affords the City the opportunity to make informed decisions associated with IT projects.

The following represents a sampling of enterprise solution projects underway:

**GIS Strategic Direction and Reform:** The City’s GIS infrastructure and applications have been upgraded to current technology. Rather than a simple migration, the reformation includes strategic business analysis ensuring GIS and integrated systems are valued and directly support the City’s departmental business objectives.

**Mobile Terminal Services:** A trial of Terminal Server, an access solution that allows remote (including mobile) access to all City data, is underway and an applications development framework, best practices, and standards will be established. Terminal Services is expected to maximize the benefits of WiMAX.

**Web Streaming:** Previously, City Commission meetings were streamed real time internally or reviewed via download. Today, using Windows Media Services, the City has the ability to stream, multi-stream and provide detailed reports of meetings to the public.

**Enterprise Content Management (ECM):** ECM includes all technologies used to capture, manage, store, preserve, and retrieve documents related to organizational processes. ECM tools and strategies allow the management of an organization's information, wherever that information exists.
EXECUTIVE UPDATE

ENTERPRISE AND SOLUTIONS DEVELOPMENT PROJECTS (continued)

**Microsoft SharePoint Server (MOSS) Portal:** (MOSS) SharePoint is a solution suited to facilitate collaboration, provide Web content management, implement improved business processes, and supply real-time access to information that is essential to the City’s elected officials, executives, and management.

**Microsoft Office Communication Server Pilot (OCS):** A proof of concept is underway to determine the productivity, budgetary, and communication benefits of this solution which enables individuals or groups to communicate easily with others in different locations using a range of different communication options, including instant messaging (IM), voice, and video.

**SQL Report Writer:** Databases are in use by virtually every city department. SQL is the language used in defining, manipulating, or retrieving information from these databases. SQL Report Writer is an essential tool for managing data and producing reports to make the data accessible and useful.

**Microsoft Office 2007:** Office is a suite of tools used universally throughout the City—our plan is to upgrade and expand use of the Office environment (i.e. InfoPath and Publisher—which this document was developed with) in 2009.

**Major Departmental IT Activities**

IT is not alone in its innovations and transformations. Below are some of the major technology activities led by departments and supported by IT. IT Project Managers will continue to counsel the departments and to support department projects that are not Enterprise.

**Assessor – Pictometry Update**

Pictometry is the toolset used by the city to view oblique imagery. All photography is being updated in collaboration with Kent County.

**Assessor/Treasurer – BS&A Equalizer Upgrade**

Planned upgrade to Equalizer application modules: Assessing, Tax, Special Assessments, Delinquent Personal Property, Miscellaneous Receivables and Business Licensing from the Pervasive environment to a .NET environment.

**Comptrollers-Vista HRMS Upgrade**

The upgrading of the core components of the current Vista 2.x application; Payroll, HR, Benefits, Self-Service and Workflow to Vista HRMS 4.x. This new version is a web-based solution and will include a secured Web Server so City users can externally access the Self-Service component.
Major Departmental IT Activities (continued)

Environmental Services – Maximo Upgrade

Operational and Asset Management tools being used by ESD for plant operations are being upgraded and advanced in their use. The Water Department intends to start using Maximo in support of Water Plant operations as well.

Engineering – Project Management (Skire)

Engineering plans to deploy Skire, a capital project management and document management system (DMS) used to track and store electronic documents and/or images of paper documents. The term has some overlap with the concepts of Content Management Systems and is often viewed as a component of Enterprise Content Management Systems and related to Digital Asset Management, Document imaging, Workflow systems and Records Management systems.

Fiscal – Financial System Upgrade (Cogsdale)

Fiscal Services is in the process of replacing the IBM Mainframe-based accounting, purchasing, and budgeting system with a client server based system running on a Microsoft SQL server database engine.

Human Resources – NeoGov

The first phase of NEOGOV is complete. NeoGov automates the hiring process including requisition, recruitment, selection, testing, applicant tracking, and reporting of key hiring metrics such as time-to-hire, recruiting costs, staff workload, EEO, applicant flow, and applicant quality.

Income Tax – eFiling

Outside vendor, Innovative Software Solutions, Inc. was hired to design a program integrating Income Tax’s current software that allows for electronic filing. The system is up and running for the 2008 tax season.

Neighborhood Improvement – Accela Automation

Neighborhood Improvement has spearheaded the strategic upgrade of the City’s Land Management System being used by several departments. The Land Management Services Strategy (http://antfarm/departments/devcenter/documents/LMS_Strategy.pdf) provides the framework for implementing a software replacement for Permits Plus to a web-based solution called Accela Automation. This strategy provides a coordinated approach to services related to land use, new construction, and property maintenance.

Parking Services – Parking Facility Automation

Supervisory Control and Data Acquisition (SCADA) Network deployment, integration, and automation of parking facilities-Cherry Commerce and Government Center parking ramps are underway with plans to automate other parking facilities.

Planning – Green Grand Rapids Website

Development of a website promoting citizen interaction in developing green-space planning for the City.
MAJOR DEPARTMENTAL IT ACTIVITIES (CONTINUED)

Police – Computer Aided Dispatch (CAD) Recycling
In the past year, the Police department has migrated the CAD software from a 1980s vintage hardware platform to a current technology server platform.

Police – Video Log
Police are planning the capture and storage of mobile digital video into a repository. This undertaking will require a minimum of 20TB of data storage space.

Traffic Safety – Traffic Website
Traffic Safety is working to create a website that will provide information to citizens traveling in Kent County related to traffic congestion, travel delays, and other traffic related concerns. Also included is the addition of necessary security features to the existing Advanced Traffic Management System, and connecting this website to the Internet.

Treasurer – eCommerce
Collaboration between the Treasurer’s office and a financial institution to provide a solution for customers to make online payments for property taxes, water bills, parking tickets, and miscellaneous receivables (such as refuse cart quarterly fees) to be accessed through the City’s website and preferably hosted on a financial institution’s website. Proposals have been collected and preliminary meetings with institutions have occurred. It is anticipated for the project to be completed in FY09.

Water – Customer Information System (CIS)
Water has hired a consulting company to assist in the evaluation of CIS alternatives and assist in deployment of a replacement to their legacy mainframe water billing system. CIS is not just a billing system, but also provides an integrated environment in which utilities enroll new customers; generate billings; manage credit and collections; track water consumption; track and manage meters; handle customer inquiries, complaints and service orders; and provide call center support. Utilities often integrate a CIS with other enterprise systems such as Geographic Information Systems.
GOALS OF GOVERNMENT 2.0

Government 2.0 is an approach to transform government, enabled by technology advances, originally promoted in Grand Rapids in 2005. This provides a road map to enhanced democracy and efficiency by leveraging technology to make government more transparent and responsive to its citizens.